

DOCKET NO.: IBIS0002-100 (IBIS-0368)**PATENT****In the Claims:**

The current status of all claims is listed below and supercedes all previous lists of claims.

Please cancel claims 36-50 and add new claims 51-68.

Claims 1-50 (cancelled).

Claim 51 (New) A service for providing characterizing information about a bioagent, comprising the steps of:

a) providing a database of base composition signatures indexed to molecular masses of amplification products of known bioagents;

b) interrogating the database with an identification query comprising a measured molecular mass of a bioagent, wherein the measured molecular mass is of an amplification product comprising a variable region that is present within a gene involved in translation, replication, recombination, repair, transcription, nucleotide metabolism, amino acid metabolism, lipid metabolism, energy generation, uptake, or secretion, and wherein the variable region is flanked by a pair of highly conserved regions; and

c) delivering a response generated by the database, wherein the response provides characterizing information for the bioagent.

Claim 52 (New) A service of claim 51 wherein the gene is DNA polymerase III beta, elongation factor TU, heat shock protein goEL, RNA polymerase beta, phosphoglycerate kinase, DADH dehydrogenase, DNA ligase, DNA topoisomerase, elongation factor G, or RNase P.

Claim 53 (New) A service of claim 51 wherein the gene is DNA polymerase III beta.

Claim 54 (New) A service of claim 51 wherein the gene is elongation factor TU.

Claim 55 (New) A service of claim 51 wherein the gene is heat shock protein goEL.

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Claim 56 (New) A service of claim 51 wherein the gene is RNA polymerase beta.

Claim 57 (New) A service of claim 51 wherein the gene is phosphoglycerate kinase.

Claim 58 (New) A service of claim 51 wherein the gene is DADH dehydrogenase.

Claim 59 (New) A service of claim 51 wherein the gene is DNA ligase.

Claim 60 (New) A service of claim 51 wherein the gene is DNA topoisomerase.

Claim 61 (New) A service of claim 51 wherein the gene is elongation factor G.

Claim 62 (New) A service of claim 51 wherein the gene is RNase P.

Claim 63 (New) A service of claim 51 wherein the response is delivered via a network.

Claim 64 (New) A service of claim 63 wherein the network is a local area network, a wide area network, or the internet.

Claim 65 (New) A service of claim 51 wherein the characterizing information comprises a genus name, a species name, or a strain name.

Claim 66 (New) A service of claim 51 wherein the variable region exhibits no greater than about 5% identity among species.

Claim 67 (New) A service of claim 51 wherein the variable region is between about 50-250 nucleotides.

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Claim 68 (New) A service of claim 51 wherein the highly conserved regions exhibit about 95% identity among species.